AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-21.   (Cancelled)

22-29.   (Cancelled)

30.   (Previously Presented) In a system that receives data from a plurality of data sources, a method of bandwidth allocation for transmitting video on a cable network, comprising:

receiving the data from the plurality of data sources;

identifying compression parameters to be used to compress the data that is received from the plurality of data sources to a desired depth of compression, the selection of compression parameters being based on a function of types of data to be displayed and a function of client capabilities;

associating the compression parameters with a set of values and threshold ranges for degrading image quality based on the types of data and the client capabilities;

degrading the image quality based on the types of data and the client capabilities for differentially converting said data into compressed video streams responsive to an instantaneous resource restriction; and

multiplexing said compressed video streams on a single transmission line.

31.   (Previously Presented) A method according to claim 30, wherein said differentially converting comprises converting each data source to a different frame rate compressed video stream.

32.   (Previously Presented) A method according to claim 30, wherein said differentially converting comprises, converting each data source to a different frame quality level.

33.   (Previously Presented) A method according to claim 30, wherein said resource restriction comprises a bandwidth restriction.

34.   (Previously Presented) A method according to claim 30, wherein said resource restriction comprises a computing resource restriction.

35.   (Previously Presented) A method according to claim 30, wherein said data sources comprise display commands.

36.   (Cancelled)

37.   (Previously Presented) A method according to claim 30, comprising providing an indication of said content with said data sources.

38.   (Previously Presented) A method according to claim 30, comprising providing an indication of said content by analyzing display commands which are comprised in said data sources.

39.   (Previously Presented) A method according to claim 30, comprising providing an indication of said content by a software which generates at least one of said data sources.

40-42. (Cancelled)

43.   (Previously Presented) A method as recited in claim 30, wherein the instantaneous resource restriction comprises an instantaneous computing resource restriction.

44.   (Previously Presented) A method according to claim 34, wherein said differentially converting comprises converting each data source to a different frame rate compressed video stream.

45.   (Previously Presented) A method according to claim 34, wherein said differentially converting comprises, converting each data source to a different frame quality level.

46.   (Cancelled).

47.   (Previously Presented) A method according to claim 31, wherein said differentially converting further comprises converting each data source to a different frame quality level.

48.   (Previously Presented) A method according to claim 31, wherein said resource restriction comprises a bandwidth restriction.

49.   (Previously Presented) A method according to claim 31, wherein said resource restriction comprises a computing resource restriction.

50.   (Previously Presented)   A method as recited in claim 30, wherein differentially converting comprises asynchronic compression, such that new compressed data is generated only when a corresponding change has first occurred in an image.

51.   (Previously Presented)   A method as recited in claim 50, further including queuing and delaying generation of new compressed data to accommodate the instantaneous resource restriction.

52.   (Previously Presented)   A method as recited in claim 30, wherein a same compression depth is achieved for each client receiving compressed video streams from the system.

53.   (Previously Presented)   A method as recited in claim 30, wherein the content includes a hint corresponding to how the content should be compressed and multiplexed based upon a minimum bandwidth requirement needed by a client.

54.   (Previously Presented)   A method as recited in claim 53, wherein the hint comprises a hint regarding a maximum quality reduction that can be applied to the content.

55.   (Previously Presented)   A method as recited in claim 30, wherein the types of data to be displayed include parts of a display.

56.   (Previously Presented)   A method as recited in claim 55, wherein the parts of the display include at least one of an icon and a menu bar.

57.   (Previously Presented)   A method as recited in claim 30, wherein the types of data to be displayed include computer game data and text data, and wherein the text data is associated with a value that permits a greater depth of compression.

58.   (Canceled)

59.   (Previously Presented)   A method as recited in claim 30, wherein the client capabilities are determined based on a customer identifier.

60.   (Previously Presented)   A method as recited in claim 59, wherein the customer identifier is a digital subscriber number.